

Letter from the Supervisor

Croydon Creek Nature Center celebrates its 15th anniversary in 2017! Opened in 2002, CCNC has been dedicated to promoting environmental stewardship among area residents through high-quality environmental education programs and outreach events. Almost every day, visitors tell us that we have the best jobs and we agree! Not only do we get to spend our days in the forest preserve, we get to help visitors make connections to the world around them through our programs, exhibits and outreach events. We owe our success to you, our visitors. You have helped to shape the Nature Center into what it is today and we thank you!

To celebrate this momentous occasion, we've compiled a list of 15 things you can do to help celebrate our first 15 years in Rockville. Activities include an **Invasive Species Pull** on May 7, our **Star Party on June**

3 and our **Family Creek Crawl on July 16**. See our full listing of events on page 2 of this newsletter.

This spring marks our 15th Annual Spring Festival and Native Plant Sale on April 29 from 10 a.m.-2 p.m. This free celebration includes a live birds of prey show by Raptors Up Close, face-painting by Kids Party Face, guided hikes of the forest preserve, as well as games and activities. A variety of native plants will be for sale on the day of the festival. We'll also have a food truck on site, which will have pizza and drinks available for purchase.

Spring and summer are glorious times here at CCNC with so much going on! Summer camps start June 19 and last throughout August. Come to our Summer Camp Open House on June 2 from 5:30-7:30 p.m. to find out more about all City of Rockville summer camp offerings and to drop off

your summer camp paperwork. There will be a few activities for children and adults can meet some of our summer camp staff. This event is open to anyone interested in participating in a summer camp operated by the City of Rockville.

At the end of August, campers ages 7-10 can join us for our **Eco-Explorers day camps on Aug. 28, 29 and 30, from 8:30 a.m. to 4 p.m.** each day. Participants can spend the last few days of summer break with us as we explore the fields, forest and creek in the Hayes Forest Preserve.

We hope you enjoy our center and programs and we are looking forward to seeing you this season!

Best regards,

Elissa Totin

Nature Center Supervisor

Croydon Creek Nature Center

852 Avery Road, Rockville, MD 2085 I

Phone

240-314-8770

Web address

www.rockvillemd.gov/croydoncreek

Email

ccnc@rockvillemd.gov

Hours of Operation

Tuesday through Saturday, 9 a.m.-5 p.m.

Sunday, I-5 p.m.

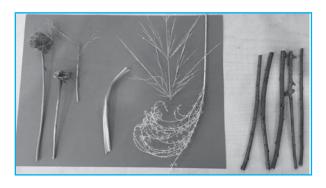
Closed Mondays

In This Issue:

Kids Cornerpg. 2
Global Climate Changepg. 3
Spring Festival and

Native Plant Sale.....pg. 4

Kids Corner



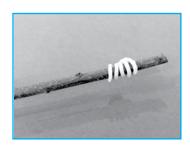
Nature Paint Brushes

Supplies:

- Sticks, one for each brush or clothespins with springs
- Lots of pieces of nature
- Rubber bands or string
- Paper and paint

Directions:

I. Go on a walk to see what you can find! Flowers, leaves, feathers, seeds and grass all make great paint brushes! Look for different textures and sizes.



2. Attach a piece of nature to each stick with a rubber band. Clothespins with springs can also work for some items. Tip: To avoid breaking any of your pieces of nature, wrap the rubber band around the end of the stick first and then tuck the piece of nature into the rubber band loops.

Use any type of paint to make a masterpiece!



15 Things to Celebrate



Opened in April 2002, CCNC was envisioned as a place for local residents to discover the wonders of nature in Rockville. Here's a list of activities that you can do to help us celebrate 15 years of providing high-quality environmental education programs to the public!

- I. Enjoy a free bird hike on April I*
- 2. Help clean up the creek on April 8
- 3. Spend the day at our Spring Festival and NativePlant Sale on April 29
- 4. Take a hike in the Hayes Forest Preserve
- 5. Share your favorite Croydon Creek photo on Instagram using #croydoncreek
- 6. Help at our Invasive Species Plant Pull on May 7
- 7. Bring a question to our Ask a Naturalist Campfire on May 20*
- 8. Learn about the stars at our Summer Star Party on June 3*

- 9. Join us for a Family Creek Crawl on July 16*
- 10. Participate in our coloring contest happening June-August
- 11. Attend our birthday party on Sept. 16*
- 12. Visit 15 of Rockville's 65 parks
- 13. Stop by for a self-guided scavenger hunt happening during the month of September
- Bring a friend to our Croydon Creep Halloween Event on Oct. 20
- 15. Stop by in October to sign our anniversary photo

*Registration required for this event

Global Climate Change

What exactly is global climate change? It is a term that you hear thrown around by a wide variety of people, whether it be scientists or politicians. With the ease that it is used, one would think that it is a simple subject, but instead it is very complex. Despite this complexity, it is an important concept to understand, as it will be affecting us for the foreseeable future.

Simply defined by the Merriam-Webster Dictionary, "climate change" is a change in the Earth's weather patterns. The Oxford English Dictionary offers a more complex definition: A change in global or regional climate patterns, in particular a change apparent from the mid- to late-20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

Let's unpack this a little.

First of all, what is changing? The main thing that is changing is the average global temperature. In the last century, the average temperature of the surface of the Earth has risen 1.5 degrees Fahrenheit and it is projected to rise at an even faster rate over the next century. The rise in temperatures is what we know as global warming and is one cause of climate change.

Over the course of history, the surface temperature of the Earth has changed many times. Scientists have learned about the changes and their causes by examining ice cores, tree rings, glacier lengths, layers of rock, ocean sediments and changes in the orbit of the Earth. Their findings have shown that changes in temperature before the Industrial Revolution were caused by natural occurrences such as volcanic eruptions and changes in solar energy reaching the Earth. However, since the mid-20th century temperatures have begun to rise more quickly. Research tells us that natural causes are no longer the major contributor to rising temperature,

but now the rise is due to increasing concentrations of greenhouse gases, such as carbon dioxide, in the atmosphere. The increase in concentration of these gases is primarily being caused by the burning of fossil fuels to produce energy. Although other contributors such as deforestation, industrial processes and some agricultural practices also cause the release of greenhouse gases, the burning of fossil fuels is the largest culprit. When these gases are released into the atmosphere they produce sort of a blanket around the Earth. This blanket traps in heat and causes temperatures on the Earth's surface to slowly rise.

At this point you may be thinking, "But wait, this year it snowed and was cold during the month of March, so how it could it be that the Earth is warming?" To understand this, we must examine the difference between weather and climate. Weather describes what is happening in the atmosphere regionally over a short period of time. For example, yesterday, the weather was rainy. Describing what happened yesterday is describing the weather, but it is not describing the overall climate. Climate describes what is happening long term, usually patterns found over at least a 30-year period, within a large geographic area. It defines what we come to expect from weather. For example, in the mid-Atlantic region we typically have warm weather in the spring. So, the fact that it snowed and was cold this year in the month of March is describing the weather for this year, but does not necessarily describe what is happening with the climate overall.

Why does any of this matter to us? Warmer weather and less winter is attractive to many people. However, climate change is the cause for many new occurrences on Earth, including changing temperature and precipitation

patterns, increasing ocean temperature and acidity, rising sea levels, frequency and severity of extreme weather events, the melting of glacial and sea ice, and shifts in ecosystems. All of these things will eventually come to affect us. Some effects will be easier for the average person to connect to climate change, like the increase in frequency of severe storms, more Code Red days in the summer and the rise in sea level, while others will be less obvious, such as changes in our ability to grow certain crops, increases in certain diseases such as the West Nile virus and Lyme disease and the lengthening of allergy season.

We can slow the effects of climate change by reducing our emission of greenhouse gasses, but that requires a commitment by us to become more careful stewards of the Earth. Some things that we can do to help are very simple such as switching to LED lightbulbs that use less energy, walking, or using mass transportation instead of driving, using ENERGY STAR appliances or purchasing green power for your home. These things are easy to do and make a big impact in both your carbon

footprint and your energy bill!

To learn more about climate change and its effects, visit the Environmental Protection Agency's website: www.epa.gov/ climatechange. Stay tuned to the next newsletter to find out about how climate change is affecting the Earth's ecosystems.



I5TH ANNUAL

Spring Festival and Native Plant Sale

at Croydon Creek Nature Center

Saturday, April 29 · 10 a.m. - 2 p.m.

Bring the entire family and enjoy the wonders of nature in an urban setting

- Woodland Hikes
- Spring Native Plant Sale
- Nature Games and Crafts
- Live Animal Show
- Face Painting
- Sustainability Exhibits



Food available for purchase by Rolling Brick food truck.

Croydon Creek Nature Center

852 Avery Road Rockville, MD 2085 I 240-314-8770 www.rockvillemd.gov/croydoncreek



The Croydon Chronicle Camps

Advanced Survivor Camp

This course takes nature exploration to a whole new level. Campers use increasingly complicated scenarios such as being lost, accidents in remote places, dealing with natural disasters (including the zombie apocalypse) to develop real survival, disaster response and primitive skills. Taught by an experienced survival and primitive skills practitioner, this camp emphasizes teamwork and leadership. Age: 9-14

9 AM-4 PM 58370 8/14-8/18 \$315/\$375

Art in the Park

Using various art methods, campers explore the Civic Center Park to find inspiration and create works of art inspired by nature. Dress for a mess and be prepared to have fun and get creative! Age: 6-8

9 AM-3 PM 58371 7/31-8/4 \$220/\$250

EcoInvestigators

Curious about creatures? Fascinated by forests? Crazy about creeks? This camp is for you! Spend your days investigating local habitats through a variety of activities, field studies, and experiments. Camp may include an off-site field trip. Age: 7-10

9 AM-3 PM 58355 6/26-6/30 \$225/\$255 58356 7/24-7/28 \$225/\$255

Farm to Table

Like food and love to cook? This camp explores the connection between the land and our food. In excursions to local farm fields and the Chesapeake Bay, we discover first hand where our food comes from and how what we eat impacts the world around us. Using local foods from the places we visit, we learn easy recipes and cooking techniques from Chef Eng of Clyde's Tower Oaks Lodge and then put our skills to the test in a cooking challenge. End the week with a farm-fresh feast at Clyde's Tower Oaks Lodge. Age: 10-14

9 AM-4 PM 58354 7/10-7/14 \$345/\$395

Croydon Creek Ntr. Ctr.

Guppy Nature Camp

Interested in animals that creep, crawl and flap? Meet the critters that call Croydon Creek home and explore exciting nature topics. Hands-on activities, experiments, hikes and crafts are all in a day's fun. Age: 5-7

9 AM-12 PM	58349	7/17-7/21	\$105/\$125
77411-12111	58351	8/7-8/11	\$105/\$125
	30331	0/7-0/11	φ103/φ123
9 AM-3 PM	58348	6/26-6/30	\$205/\$245
	58350	7/24-7/28	\$205/\$245
	58352	8/21-8/25	\$205/\$245

Nature Play Camp

Make the most of the first few days of summer break by spending it outdoors at CCNC. Each day provides participants with opportunities to connect with nature through naturalist-led activities, as well as unstructured, open-ended discovery and creative play. Age: 7-10

9 AM-4 PM 58357 6/19-6/23 \$235/\$265

Nature Service Learning Camp

Have fun at Croydon Creek while earning Student Service Learning (SSL) hours. Participants investigate local environmental issues each morning. In the afternoon they complete an ecofriendly volunteer project. Each person receives 20 SSL hours total. Age: 10-14

9 AM-3 PM 58359 8/7-8/11 \$225/\$255

Like us on Facebook



Croydon Creek Nature Center



To register visit www.rockvillemd.gov/guide

Price key: Resident Discount/Non Resident Rate

Croydon Creek Nature Center • 852 Avery Road, Rockville, MD, 20851

Phone

240-314-8770

Website

www.rockvillemd.gov/croydoncreek

Email

ccnc@rockvillemd.gov



Hours of Operation

Tuesday through Saturday, 9 a.m.-5 p.m. Sunday, I-5 p.m. Closed Mondays

Summer Programs

Celebrate Honeybees (Adult/Child)

Learn about the amazing and gentle honeybee with our volunteer beekeeper. Explore beekeeping, honeybee biology, and extract honey from the comb. All participants must register and children under age 10 must be accompanied by a registered adult. Age: 5+

60149 Sa 7/29 1:30-3 PM \$5/\$6

Creek Crawl

How many different animals live in Croydon Creek? Find out as we spend an afternoon in our aquatic habitat searching and identifying local critters. Wear closed-toe shoes and bring a towel. Children under 7 must be accompanied by an adult. All particpants must register. Age: I+

60156 7/16 2-3:30 PM Su \$5/\$6

Croydon Creek Campfire (Adult/Child)

Gather around the campfire with your friends for stories, snacks and more. An adult must accompany children and all participants must register.

Ask A Naturalist - All Ages

Curious about nature? You bring your burning questions about the natural world and we'll bring the s'mores ingredients.

59200 5/20 3:30-4:30 PM \$5/\$6

Eco-Explorers Day Camp

End your summer with the naturalists at CCNC exploring the forest, investigating the meadow and splashing in the creek. Enjoy hikes in the Hayes Forest Preserve, games and other creative outdoor activities each day. Bring a lunch. Age: 7-10

60158	Μ	8/28	8:30 AM-4 PM	\$55/\$65
60159	Tu	8/29	8:30 AM-4 PM	\$55/\$65
60160	W	8/30	8:30 AM-4 PM	\$55/\$65

iNaturalist

iNaturalist is a site, app and community for reporting personal observations of any plant or animal in the world. It's a great platform for recording daily observations of the living natural world and a useful tool to find out what others have seen in a particular area. We'll explain more about the app and website and teach participants how to use the app on a hike in the forest. Download it on iTunes or Google Play prior to class. Age: 12+

59193 Sa 9:30-10:30 AM 5/13 Free

Little Acorns

Explore nature with your little ones through a variety of play-based activities. Time will be spent outdoors weather permitting. Adult participation required. Spaces are limited. Advanced registration recommended. Ages 18-36 mos.

Flowers	•			
59207	Th	5/18	10-11 AM	\$7/\$8
	• • • •	5, . 5		47740
Sounds	in Na	ture		
59208	Th	6/1	10-11 AM	\$7/\$8
				• • • • • • • • • • • • • • • • • • • •
Butterf	lies			
59209	Th	6/15	10-11 AM	\$7/\$8

Nature Tots (Adult/Child)

Discover the wonders of nature with your child. Each session, a naturalist helps you delve into a different nature topic through nature play, crafts, stories and hikes. Dress for the weather. Adult participation required. Spaces are limited. Ages 2-5 yrs.

Nocturnal Animals

59189 Sa 5/20 10-11:30 AM \$8

Creek Critters

59190	Sa	6/17	10-11:30 AM	\$8/\$10
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Outdoor Science Club

Young scientists investigate a variety of science topics through handson activities and time spent exploring the forest preserve. Ages 6-8

Plants

Spend time in the meadow and forest learning how to identify common flowering plants.

59214 Su 5/211:30-3 PM \$8/\$10

Spring Stream Ecology

Prepare to get wet as we take to the creek to discover late-spring macroinvertebrates.

59215 Su 6/18 1:30-3 PM \$8/\$10

Polliwog Adventures (Adult/Child)

Each week explore a new topic in natural history. Through stories, short hikes, games and activities, little ones will learn about nature in a hands-on environment. Adult participation required. Spaces are limited. Age: 2-5.

Honeybees B	uzz
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Honey	pees R	uzz		
60141	Th	7/6	10-11 AM	\$7/\$8
Secret	of See	ds		
60142	Th	7/13	10-11 AM	\$7/\$8
Worm	s & Bu	gs		
60143	Th `	7/20	10-11 AM	\$7/\$8
Marvel	lous Ma	ammals		
60144	Th	8/3	10-11 AM	\$7/\$8
Reptile	es & Ar	nphibians		
60145	Th	8/17	10-11 AM	\$7/\$8
In the	Meado	w		
60146	Th	8/24	10-11 AM	\$7/\$8

Star Party

Discover objects easily visible in the night sky, look through telescopes with an astronomer and enjoy a campfire treat. All participants must register. This program is dependent on good weather and clear skies.

Age: 7+ 59203	Sa	6/3	9-10 PM	\$7/\$9